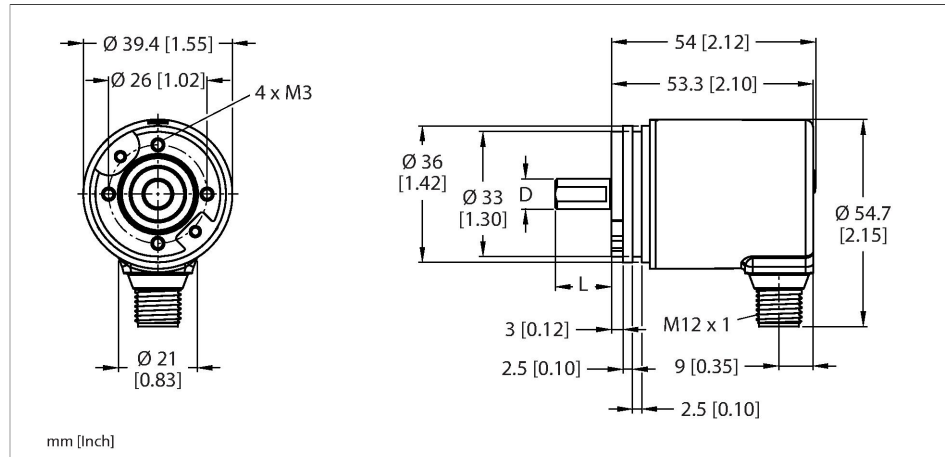


# RS-180S8S-7AAR-H1151/N1

## Absolute Shaft Encoder

### Industrial Line



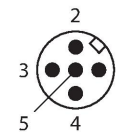
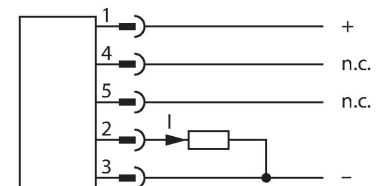
### Features

- Synchro flange, Ø 36 mm
- Solid shaft, Ø 8 mm × 20 mm
- Magnetic measuring principle
- Shaft material: stainless steel
- IP67 rated on the shaft side
- -40...+85 °C
- Max. 4000 rev/min
- 10...30 VDC
- Analog output 4...20 mA
- Counting mode CW
- M12 × 1 male connector, 5-pin
- 45° resolved in 12 bit (4096 positions)

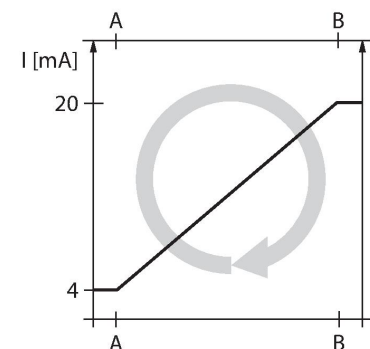
### Technical data

|                                  |                         |
|----------------------------------|-------------------------|
| Type                             | RS-180S8S-7AAR-H1151/N1 |
| ID                               | 200009409               |
| Measuring principle              | Magnetic                |
| <b>General data</b>              |                         |
| Max. rotational speed            | 4000 rpm                |
| Measuring range                  | 0...45 °                |
| Repetition accuracy              | ± 0.2 ° At 25 °C        |
| Absolute accuracy                | ± 1 ° At 25 °C          |
| Output type                      | Absolute singleturn     |
| Resolution singleturn            | 12 Bit                  |
| <b>Electrical data</b>           |                         |
| Operating voltage U <sub>B</sub> | 10...30 VDC             |
| No-load current                  | ≤ 38 mA                 |
| Short-circuit protection         | yes                     |
| Output function                  | Analog output           |
| Current output                   | 4...20 mA               |
| <b>Mechanical data</b>           |                         |
| Flange type                      | Synchro flange          |
| Flange diameter                  | Ø 36 mm                 |
| Shaft Type                       | Solid shaft             |
| Shaft material                   | Stainless Steel         |
| Housing material                 | Die-cast zinc           |
| Electrical connection            | Connector, M12 × 1      |

### Wiring diagram



### Functional principle



## Technical data

|                                     |                                            |
|-------------------------------------|--------------------------------------------|
|                                     | M12, 5-pole                                |
| Axial shaft load                    | 20 N                                       |
| Radial shaft load                   | 40 N                                       |
| Environmental conditions            |                                            |
| Ambient temperature                 | -40...+85 °C                               |
| Vibration resistance (EN 60068-2-6) | 30 g (300 m/s <sup>2</sup> ), 10...2000 Hz |
| Shock resistance (EN 60068-2-27)    | 500 g (2500 m/s <sup>2</sup> ), 4 ms       |
| Protection class shaft              | IP67                                       |